

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/876,917	DEEVI, SEETHARAMA C.
	Examiner	Art Unit
	Walter D. Griffin	1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the amendment filed on June 2, 2004.
2.  The allowed claim(s) is/are 1-23 and 25-29.
3.  The drawings filed on 11 June 2001 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

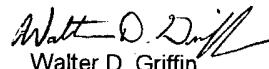
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_.
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

  
 Walter D. Griffin  
 Primary Examiner  
 Art Unit: 1764

**REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: The primary reason for allowance is that the prior art of record does not disclose or suggest a cracking tube that comprises an iron aluminide alloy with transition metal oxides in an amount effective to provide a coefficient of thermal expansion substantially the same as the coefficient of thermal expansion of the second material as in claims 1 and 27, does not disclose a cracking tube that comprises a first layer of an iron aluminide alloy that includes at least 2% of transition metal oxides as in claim 4, does not disclose or suggest a cracking tube that has an iron aluminide layer with the composition as in claims 7 and 29, does not disclose a method of manufacturing such tubes, and does not disclose or suggest using such tubes in the conversion of hydrocarbons. Regarding claim 9, the prior art of record does not disclose or suggest a cracking tube with the iron aluminide alloy in the form of a sintered nanocrystalline intermetallic powder.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Interview Summary***

In the interview on August 4, 2004, at the examiner's request, applicant's representative supplemented the response of June 2, 2004 by discussing that claim 9 is distinguished over the applied prior art in that claim 9 includes the limitation that the alloy is in the form of a sintered nanocrystalline intermetallic powder whereas the applied

Art Unit: 1764

references disclose the melting of the alloy. Applicant's representative pointed out that an alloy that has been melted is not in the form of a sintered nanocrystalline intermetallic powder. The examiner stated that he would have to further consider the rejection of claim 9 in view of the interview. Upon further review, the examiner has determined that the prior art of record does not disclose or suggest a cracking tube as in claim 9.

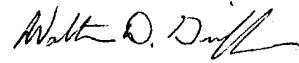
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1764

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Walter D. Griffin  
Primary Examiner  
Art Unit 1764

WG  
August 6, 2004